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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/518,204

08/23/2005

Toru Komatsu

U 015528-7

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7590

06/26/2008

LADAS & PARRY LLP  
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NEW YORK, NY 10023

EXAMINER

GREGORIO, GUINEVER S

ART UNIT

PAPER NUMBER

4162

MAIL DATE

DELIVERY MODE

06/26/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/518,204	<b>Applicant(s)</b> KOMATSU, TORU	
	<b>Examiner</b> GUINEVER S. GREGORIO	<b>Art Unit</b> 4162	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11 August 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) 4-8 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-8 are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>05/30/2006, 08/11/2006, 12/16/2004</u> .                      | 6) <input type="checkbox"/> Other: _____                          |



### **DETAILED ACTION**

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-3, drawn to process for producing charcoal.

Group II, claim(s) 4-8, drawn to an apparatus for producing charcoal.

The inventions listed as Groups I and II do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: The process for producing charcoal as stated in claim 1 is known in the art as demonstrated by Schmalfeld et al. (U.S. Pat. No. 5,584,970). Schmalfeld et al. teaches a process for producing charcoal comprising heating biomass to a temp of 800°C to 1400°C in a metal vessel and holding the temperature for 5 to 30 hours. Thus the special technical feature does not make a contribution over the prior art and restriction is proper.

During a telephone conversation with William R. Evans on June 18, 2008 a provisional election was made without traverse to prosecute the invention of process for producing charcoal, claims 1-3. Affirmation of this election must be made by applicant in replying to this Office action. Claims 4-8 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Schmalfeld et al. (U.S. Pat. No. 5,584,970).

Schmalfeld et al. teaches a process of producing charcoal from lump biomass in a downwardly moving bed in a shaft reactor (column 4, lines 42-44). A shaft reactor is comprised of a metal vessel which is kept at a constant temperature (column 2, lines 38-60). This corresponds to the definition of a kiln (Merriam Webster Dictionary). Schmafelf et al. teaches feeding exhaust gas into a combustion chamber and from combustion chamber withdrawing a first combustion gas having a temperature in the range from 800°C to 1400°C (column 4, lines 55-60). Examiner takes the position that the withdrawn air reflects the environmental temperature inside the combustion chamber. Therefore the combustion gas temperature corresponds with the forcibly feeding air into said kiln to keep the temperature within the kiln at 800°C or above. Schmafelf et al. teaches exhaust gas that contains water vapor (column 2, line 4). Schmafelf et al. teaches lump wood which is being transformed to wood charcoal usually is in the carbonizing zone a residence time of about 5 to 30 hours (column 2, lines 8-10).

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Sowards (U.S. Pat. No. 4,510,021) teaches a fluidized bed charcoal particle producing system wherein combustible waste is introduced into a fluidized bed within a vessel (column 1, lines 33-36). Sowards teaches a high capacity blower to deliver ambient air into the fluidized bed which maintains the needed bed temperature through continuous oxidation of fuel particles (column 3, lines 35-40). Sowards teaches pressurized air (column 3, lines 17-18). Halm (U.S. Pat. No. 4,472,245) teaches materials which become carbonized at high temperatures such as wood, cellulose, household refuse, used tires, plastics, tarsand and oil shale are subjected to pyrolysis or gasification in an electric shaft furnace (abstract, lines 1-5). Halm teaches a furnace with a temperature of 800 °C (column 2, lines 22-23). Halm teaches introducing steam into the furnace (column 2, line 24).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GUINEVER S. GREGORIO whose telephone number is (571)270-5827. The examiner can normally be reached on Monday-Thursday, 10:30-5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer McNeil can be reached on 571-272-1540. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1791

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

gsg  
June 20, 2008

/Melvin C. Mayes/  
Primary Examiner, Art Unit 1791